



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0090671**
Effective Date: September 1, 2021
Expiration Date: January 31, 2026

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Parts I, II, and III of this permit as set forth herein.

Owner Name: Alleghany County
Facility Name: Lower Jackson River Regional WWTP
City: Iron Gate
County: NA
Facility Location: 50 Fork Farm Road (Route 727), Iron Gate, VA

The owner is authorized to discharge to the following receiving stream:

Stream: Jackson River
River Basin: James River, Upper
River Subbasin: NA
Section: 12
Class: IV
Special Standards: None

R. Nelson Dail
Blue Ridge Regional Office
Deputy Regional Director

Date

A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the issuance of the Certificate to Operate the 3.5 MGD facility or the expiration date, whichever comes first, the permittee is authorized to discharge from outfall number 001. This discharge shall be limited and monitored as specified below:

<u>Effluent Characteristic</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) ^a	NL	NA	NA	NL	Continuous	TIRE
pH (Standard Units)	NA	NA	6.0	9.0	1/Day	Grab
BOD ₅ ^{b,d}	30 mg/L 295 kg/d	7.5 mg/L 443 kg/d	NA	NA	1/Week	24 HC
Total Suspended Solids ^{b,d}	30 mg/L 295 kg/d	45 mg/L 443kg/d	NA	NA	5 Days/Week	24 HC
Dissolved Oxygen	NL mg/L	NL mg/L	6.0 mg/L	NA	1/Day	Grab
Total Nitrogen (TN) ^b (#013)	NL mg/L	NA	NA	NL mg/L	1/Week	24 HC
Total Phosphorus (TP) ^b (#012)	NL mg/L	NA	NA	NL mg/L	1/Week	24 HC
TN, Annual Average ^b (#792)	3.0 mg/L	NA	NA	NA	1/Year	Calculated
TP, Annual Average ^b (#794)	0.3 mg/L	NA	NA	NA	1/Year	Calculated
TN, Monthly Load ^b (#791)	NL lbs/month	NA	NA	NA	1/Month	Calculated
TP, Monthly Load ^b (#793)	NL lbs/month	NA	NA	NA	1/Month	Calculated
TN, Total Load (June – Oct.) ^b (#901)	NA	NA	NA	19,906 pounds	1/Year	Calculated
TP, Total Load (June – Oct.) ^b (#900)	NA	NA	NA	1,659 pounds	1/Year	Calculated
Temperature	NA	NA	NA	NL °C	1/Day	IS
<i>Escherichia coli</i> (N/100 ml)	126	NA	NA	NA	1/Day	Grab
	(geometric mean)				(between 10am-4pm)	

NL = No Limitation with monitoring required NA = Not Applicable 24 HC= 24 hour composite IS = immersion stabilization TIRE = totalizing, indicating, recording equipment

- a. The design flow of this treatment facility is 2.6 MGD. See Part I.C.1 for additional flow requirements.
- b. See Part I.C.13 for quantification levels and reporting requirements. Additional nutrient calculation requirements are included.
- c. See Part I.C.12 for additional monitoring requirements.
- d. At least 85% removal for BOD₅ and TSS shall be attained for this effluent. The permittee shall report the influent BOD₅ and TSS percent removal quarterly. During the months that influent sampling is performed for percent removal reporting purposes, the influent sampling frequency shall be performed at the same sample frequency as the corresponding effluent samples. The monthly average BOD₅ and TSS influent concentrations and percent removal shall be reported on the DMR by the 10th of the month following sampling.
- e. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. Limitations and Monitoring Requirements

2. During the period beginning with the Certificate to Operate the 3.5 MGD facility and continuing until the expiration date the permittee is authorized to discharge from outfall number 001. This discharge shall be limited and monitored as specified below:

<u>Effluent Characteristic</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) ^a	NL	NA	NA	NL	Continuous	TIRE
pH (Standard Units)	NA	NA	6.0	9.0	1/Day	Grab
BOD ₅ ^{b,d}	26 mg/L 344 kg/d	39 mg/L 517 kg/d	NA	NA	1/Week	24 HC
Total Suspended Solids ^{b,d}	30 mg/L 397 kg/d	10 mg/L 596 kg/d	NA	NA	5 Days/Week	24 HC
Dissolved Oxygen	NL mg/L	NL mg/L	6.0 mg/L	NA	1/Day	Grab
Total Nitrogen (TN) ^b (#013)	NL mg/L	NA	NA	NL mg/L	1/Week	24 HC
Total Phosphorus (TP) ^b (#012)	NL mg/L	NA	NA	NL mg/L	1/Week	24 HC
TN, Annual Average ^b (#792)	3.0 mg/L	NA	NA	NA	1/Year	Calculated
TP, Annual Average ^b (#794)	0.3 mg/L	NA	NA	NA	1/Year	Calculated
TN, Monthly Load ^b (#791)	NL lbs/month	NA	NA	NA	1/Month	Calculated
TP, Monthly Load ^b (#793)	NL lbs/month	NA	NA	NA	1/Month	Calculated
TN, Total Load (June – Oct.) ^b (#901)	NA	NA	NA	19,906 pounds	1/Year	Calculated
TP, Total Load (June – Oct.) ^b (#900)	NA	NA	NA	1,659 pounds	1/Year	Calculated
Temperature	NA	NA	NA	NL °C	1/Day	IS
<i>Escherichia coli</i> (N/100 ml)	126	NA	NA	NA	1/Day	Grab
	(geometric mean)				(between 10am-4pm)	

NL = No Limitation with monitoring required NA = Not Applicable 24 HC= 24 hour composite IS = immersion stabilization TIRE = totalizing, indicating, recording equipment

- a. The design flow of this treatment facility is 3.5 MGD. See Part I.C.1 for additional flow requirements.
- b. See Part I.C.13 for quantification levels and reporting requirements. Additional nutrient calculation requirements are included.
- c. See Part I.C.12 for additional monitoring requirements.
- d. At least 85% removal for BOD₅ and TSS shall be attained for this effluent. The permittee shall report the influent BOD₅ and TSS percent removal quarterly. During the months that influent sampling is performed for percent removal reporting purposes, the influent sampling frequency shall be performed at the same sample frequency as the corresponding effluent samples. The monthly average BOD₅ and TSS influent concentrations and percent removal shall be reported on the DMR by the 10th of the month following sampling.
- e. There shall be no discharge of floating solids or visible foam in other than trace amounts.

B. Total Residual Chlorine Limitations and Monitoring Requirements

If chlorine is chosen as a disinfection method, TRC [DMR #005] shall be limited and monitored by the permittee as specified below:

1. The permittee shall monitor TRC at the outlet of each operating chlorine contact tank at 2 hour intervals by grab sample.
2. No more than 36 samples taken at the outlet of each chlorine contact tank shall be less than 1.0 mg/L for any one calendar month. [DMR # 157]
3. No TRC sample collected at the outlet of the chlorine contact tank shall be less than 0.60 mg/L [DMR # 213].
4. If dechlorination facilities exist the samples shall be collected prior to dechlorination.
5. Effluent TRC shall be monitored and limited, following dechlorination, by the permittee as specified below for the 2.6 MGD and 3.5 MGD facilities:

<u>Effluent Characteristic</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Frequency</u>	<u>Sample Type</u>
TRC (#005) (2.6 MGD)	0.044 mg/L	0.046 mg/L	1/ 2 hours	Grab
TRC (#005) (3.5 MGD)	0.036 mg/L	0.038 mg/L	1/ 2 hours	Grab

C. Special Conditions

1. **95% Capacity Reopener**

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ Blue Ridge Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Blue Ridge Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

C. Special Conditions

2. **Indirect Dischargers**

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. **CTC, CTO Requirement**

The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9 VAC 25-790), obtain a Certificate to Construct (CTC), and Certificate to Operate (CTO) from the Department. The request for a CTC or CTO shall be submitted by the design engineer and owner to the DEQ Regional Office prior to constructing the wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

4. **Operations and Maintenance Manual Requirement**

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment that is in accordance with the Virginia Pollutant Discharge Elimination System Regulations, 9 VAC 25-31 and the Sewage Collection and Treatment Regulations, 9 VAC 25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 signatory requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review during facility

C. Special Conditions

4. **Operations and Maintenance Manual Requirement (Continued)**

inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M Manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, stormwater, and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;
- e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory, and record keeping;
- f. A plan for the management and/or disposal of waste solids and residues.
- g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
- h. List of facility, local, and state emergency contacts; and
- i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

5. **Licensed Operator Requirement**

The permittee shall employ or contract at least one **Class I** licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of

C. Special Conditions

5. **Licensed Operator Requirement (Continued)**

the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has ground for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

6. **Reliability Class**

The permitted treatment works shall meet Reliability **Class II** requirements.

7. **Closure Plan**

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ Blue Ridge Regional Office a closure plan for the existing treatment works. The plan shall address the following information at a minimum: Verification or elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Blue Ridge Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

8. **Nutrient Enriched Reopener**

This permit may be modified or alternatively revoked and reissued to include new or alternative nutrient limitations and/or monitoring requirements should the Board adopt nutrient standards for the waterbody receiving the discharge or if a future water quality regulation or statute requires new or alternative nutrient control.

C. Special Conditions

9. **Total Maximum Daily Load (TMDL) Reopener**

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits, or conditions on the facility that are not consistent with the permit requirements.

10. **Sludge Reopener**

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

11. **Sludge Use and Disposal**

The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the reissuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

12. **Water Quality Criteria Monitoring**

The permittee shall monitor the effluent at outfall 001 for the substances noted in Attachment A of the permit according to the indicated analysis number, quantification level, sample type, and frequency. Monitoring data for this condition shall be collected three times during the permit term. At least two of the samples must have been taken no fewer than 4 months and no more than 8 months apart. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in *Attachment A*.

Using the Attachment as the reporting form, the data shall be submitted by the dates in the table below. Laboratory data summary sheets and chain of custody sheets shall be submitted with Attachment A of the permit to document the laboratory methods used, practicable quantification levels, field collection, and preservation

C. Special Conditions

12. **Water Quality Criteria Monitoring (Continued)**

methods. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

<u>Data</u>	<u>Compliance Sample Collection Periods</u>	<u>Data Submission Dates</u>
Sample 1	9/1/23- 12/31/23	01/10/24
Sample 2	1/1/24 – 6/30/24	07/10/24
Sample 3	7/1/24 – 12/30/24	01/10/25

13. **Compliance Reporting**

- a. The quantification levels (QLs) shall be less than or equal to the following concentrations:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
BOD ₅	2 mg/L
Chlorine	0.10 mg/L
Nitrogen, Total	0.50 mg/L
Phosphorus, Total	0.01 mg/L
Total Kjeldahl Nitrogen	0.50 mg/L
Total Suspended Solids	1.0 mg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure the proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

- b. Monthly Average

Compliance with the monthly average limitations and/or reporting requirements for the parameters, except nitrogen and phosphorus, listed in subsection a. of this permit condition shall be determined as follows:

C. Special Conditions

13. **Compliance Reporting (Continued)**

All concentration data below the QL used for analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

c. **Weekly Average**

Compliance with the weekly average limitations and/or reporting requirements for the parameters, except nitrogen and phosphorus, listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis, then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

d. **Daily Maximum**

Compliance with the daily maximum limitations and/or reporting requirements for the parameters, except nitrogen and phosphorus, listed in the subsection a. of the permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL

C. Special Conditions

13. **Compliance Reporting (Continued)**

used for the analysis) shall be treated as zero. An arithmetic average shall be calculation using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily average thus determined shall be reported on the DMR as the Daily Maximum.

If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the maximum value of the daily averages shall be reported as "<QL." Of reporting for quantity is required on the DMR and the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

e. Single Datum

Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise, the numerical value shall be reported.

f. Significant Digits

The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up to or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

g. Nutrient Reporting Calculations

For total nitrogen (TN), if none of the daily concentration data for the respective species (e.e., TKN, nitrates/nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

For total phosphorus, all daily concentration data below the qualification level (QL) for the analytical method used should be treated as half the QL. All daily

C. Special Conditions

13. **Compliance Reporting (Continued)**

concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

(1) Monthly Average Concentrations (MC_{avg})

The monthly average total nitrogen concentration shall be calculated from the sum of the total kheldahl nitrogen (TKN) and nitrate plus nitrate based from 24 hour composite samples collected on a weekly basis. This calculated average shall be reported monthly as parameter code **#013**.

The monthly average phosphorus concentration shall be determined from 24 hour composite samples collected on a weekly basis and reported monthly as parameter code **#012**.

(2) Annual Average Concentration (AC_{avg})

For each calendar month, the DMR shall show the monthly average concentration (mg/L) parameter code #013. The annual average concentration shall be calculated in accordance with the following formula and reported as parameter codes **#792** (TN) and **#794** (TP):

$$AC_{avg} = (\sum_{\text{(Jan.-Dec.)}} MC_{avg}) / (12 \text{ months})$$

(2) Monthly Load Calculation – All concentration data shall be reported to the nearest 0.01 MGD.

DL = daily load (reporting as pound/day)
[daily concentration (mg/L) x flow¹ (MGD) x 8.345]
¹Flow from the day when the sample was taken

$$ML_{avg} = \frac{\sum DL}{s}$$

where

ML_{avg} = monthly average load (lb/d)

s=number of samples

C. Special Conditions

13. **Compliance Reporting (Continued)**

The total monthly load shall be calculated as a summation of each daily load divided by the total number of samples collected during the month in accordance with the following formula.

$$ML = ML_{avg} * d$$

Where:

ML = total monthly load (lb) (reported as pounds/day)

d=number of discharge days in the calendar month

The average pounds/day (ML_{avg}) is multiplied by the total days in the month to calculate the total monthly load in pounds and reported as parameter codes **#791** (TN) and **#793** (TP) and reported as pounds/day.

(3) **Annual Reporting for Load during June – October
(Growing Season Calculations)**

The total seasonal load for June – October shall be calculated as a summation of each month's total loading values in accordance with the following formula and reported as parameter codes **#901** (TN) and **#900** (TP). Values are reported in terms of total pounds on the October DMR due on November 10th.

$$\text{Total load} = \sum ML_{(\text{June} - \text{Oct.})}$$

14. **PCB Monitoring for Total Maximum Daily Load (TMDL)**

The permittee shall monitor the effluent at Outfall 001 for Polychlorinated Biphenyls (PCBs) in accordance with the schedule in f. below. DEQ will use this data for development of a PCB TMDL for the Jackson River. The permittee shall conduct the sampling and analysis in accordance with the requirements specified below. At a minimum:

- a. Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668, congener specific results as specified in the PCB Point Source Monitoring Guidance. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

C. Special Conditions

- b. The permittee shall collect a minimum of 1 wet weather sample and 1 dry weather sample as per the schedule below, according to the PCB Point Source Guidance No. 09-2001, Appendix C (Sample Collection Methods for Effluent and Storm Water) and/or its amendments. Samples previously collected from these outfalls and analyzed with Method 1668, may be used in satisfying the total number of samples required even if the collection occurred prior to the current permit term.
- c. The sampling protocol shall be submitted to DEQ's Central Office PCB TMDL staff for review and approval in accordance with the schedule in f.1 below prior to the first sample collection.
- d. The data shall be submitted to DEQ's Central Office PCB TMDL staff by the 10th day of the month following receipt of the results according to the PCB Point Source Guidance, Appendix E (Reporting Requirements for Analytical (PCB) Data Generated Using EPA Method 1668). The submittal shall include the unadjusted and appropriately quantified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results should be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.
- e. If the results of this monitoring indicate actual or potential exceedance of the water quality criterion or the Waste Load Allocation specified in the approved TMDL, the permittee shall submit to DEQ's Regional Office for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the collection system. A component of the plan may include an evaluation of the PCB congener distribution in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works.
- f. PCB monitoring shall proceed in accordance with the following schedule:

1. Complete and submit PCB monitoring results to the DEQ Central Office.	not later than 9/10/22
2. If required, Submit Pollutant Minimization Plan	within 1 year of notification by DEQ

C. Special Conditions

15. **Permit Application Requirement**

In accordance with Part II.M of the permit, a new and complete permit application shall be submitted for the reissuance of this permit by the following date: **August 4, 2025**.

D. Significant Industrial User

1. Within 180 days of the effective or modification date of this permit, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
2. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with item (1) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in item (4) below may be suspended by the DEQ.
3. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users discharging wastewater to the treatment works.
4. The approvable pretreatment program submission shall at a minimum contain the following parts:
 - a. Legal authority,
 - b. Program procedures,
 - c. Funding and resources,
 - d. Local limits evaluation and local limits if needed,
 - e. Enforcement response plan, and
 - f. List of Significant Industrial Users*.

D. Significant Industrial User

5. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report no later than January 31 of each year and must include:
 - a. An updated list of the Significant Industrial Users* noting all of the following:
 - (1) facility address, phone, and contact name
 - (2) explanation of SIUs deleted from the previous year list
 - (3) identify which IUs are subject to Categorical Standards and note which Standard (ie. metal finishing)
 - (4) specify which 40 CFR part(s) is/are applicable
 - (5) indicate which IUs are subject to local standards that are more stringent from Categorical Pretreatment Standards
 - (6) identify which IUs are subject only to local requirements
 - (7) identify which IUs are subject to Categorical Pretreatment Standards at are subject to reduced reporting requirements under 9 VAC 25-31-840 E.3.
 - (8) identify which IUs are non-significant Categorical Industrial Users
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the number and types of Significant Industrial User inspections performed by the permittee.
 - d. All information concerning interference, upset, permit violations, or water quality standards violations directly attributable to the Significant Industrial User and enforcement actions to alleviate said event.
 - e. A description of the permittee's enforcement actions over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
 - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
 - k. Signature of an authorized representative.

D. Significant Industrial User

6. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):
 - a. If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law, or State regulations;
 - b. If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and
 - c. If federal, state or local requirements change.

* A significant industrial user is one that:

1. Has an average flow of 25,000 gallons or more per average workday of process ** wastewater;
2. Contributes a process waste stream which makes up 5.0 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to the categorical pretreatment standards; or
4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

** Excludes sanitary, non-contact cooling water, and boiler blowdown.

E. Whole Effluent Toxicity Testing

1. **Biological Monitoring (2.6 MGD Facility)**

- a. In accordance with the schedule in 2. below, the permittee shall conduct chronic toxicity tests for the duration of the permit. The permittee should collect 24-hour flow-proportioned composite samples of final effluent from outfall 001.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing $100/NOEC$ for DMR reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The test dilutions should be able to determine compliance with the following endpoint:

Chronic NOEC of 7% equivalent to a TU_c of 14.28.

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing $100/NOEC$ for DMR reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

E. Whole Effluent Toxicity Testing

1. **Biological Monitoring (2.6 MGD Facility) (Continued)**

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- c. The test data will be evaluated by the STATS program for reasonable potential at the conclusion of test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicated that a limit is needed a WET limit and compliance schedule will be required and the toxicity tests of 1.a may be discontinued.

2. **Reporting Schedule (2.6 MGD Facility):**

The permittee shall submit a copy of the toxicity test reports specified in this whole effluent toxicity testing special condition to the DEQ Blue Ridge Regional Office in accordance with the following schedule:

<u>Period</u>	<u>Testing Period</u>	<u>Data Submission Dates</u>
Annual 1	9/1/21 – 8/31/22	9/10/22
Annual 2	9/1/22 – 8/31/23	9/10/23
Annual 3	9/1/23 – 8/31/24	9/10/24
Annual 4	9/1/24 – 8/31/25	9/10/25

3. **Biological Monitoring – Outfall 001 (3.5 MGD Facility)**

- a. Commencing within 90 days from the issuance of the Certificate to Operate the upgraded facility, the permittee shall conduct quarterly acute and chronic toxicity tests until four quarters of testing are completed. The permittee should collect 24-hour flow-proportioned composite samples of final effluent from outfall 001. Sampling shall be representative of any discharges which include blended wastewater.

E. Whole Effluent Toxicity Testing

3. **Biological Monitoring – Outfall 001 (3.5 MGD Facility) (Continued)**

The acute tests to use are:

48 Hour Static Acute Test using *Ceriodaphnia dubia*

48 Hour Static Acute Test using *Pimephales promelas*

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} . Express the result as TU_a (Acute Toxic Units) by dividing $100/LC_{50}$ for DMR reporting.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

Chronic 3-Brood Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing $100/NOEC$ for DMR reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

b. The test dilutions should be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

(2) Chronic NOEC for the 3.5 MGD Facility of 8% equivalent to a TU_c of 12.50.

E. Whole Effluent Toxicity Testing

3. **Biological Monitoring – Outfall 001 (3.5 MGD Facility) (Continued)**

- c. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- d. Once four quarters of data are collected, the permittee shall begin annual toxicity. The first annual tests shall be conducted within 6 months of the last quarterly toxicity tests. If there was no acute toxicity in any of the quarterly testing events, then only chronic toxicity testing shall be required. Otherwise, both acute and chronic toxicity testing shall be required. Toxicity testing shall be using both species identified for the 2.6 MGD facility.
- e. The test data may be evaluated for reasonable potential at the conclusion of test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed a WET limit and compliance schedule will be required and the toxicity tests of Part I.E may be discontinued.

4. **Reporting Schedule (Outfall 001 – 3.5 MGD Facility):**

<u>Period</u>	<u>Compliance Periods</u>	<u>DMR Submission Dates</u>
Quarter 1	Conduct 1 st quarter tests within 90 days following issuance of the certificate to operate upgraded facility.	10 th of month following completion of tests
Quarter 2	Conduct 2 nd quarter tests by the end of the 6th month following the issuance of the certificate to operate upgraded facility.	10 th of month following completion of tests
Quarters 3 -4	Conduct subsequent quarterly tests in accordance with the increments described above.	10 th of month following completion of tests
Annual	Conduct 1 st annual toxicity tests within 12 months of the last toxicity testing event.	10th of month following completion of tests
Annual	Conduct subsequent annual toxicity tests in accordance within 12 month increments described above.	10th of month following completion of tests

PART II - CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
 - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.
 - c. Samples taken shall be analyzed in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A.1.a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee

B. Records (Continued)

shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit no later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Environmental Quality
Blue Ridge Regional Office
901 Russell Drive
Salem, VA 24153

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

F. Unauthorized Discharges (Continued)

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I shall be made to the Department's Regional Office by e-mail (proprep@deq.virginia.gov) or phone (804-527-5020). For reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), submit an e-mail message (preferred) or leave a phone message and this shall fulfill the immediate reporting requirement. Immediate notification shall include the following at a minimum:

- Date and time of event;
- Location of event;
- Estimate of volume discharged;
- Nearest receiving stream or affected water body; and
- Contact name and phone number

For emergencies, the Virginia Department of Emergency Management maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes (Continued)

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

K. Signatory Requirements (Continued)

- c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II.K.1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

L. Duty to Comply (Continued)

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II.U.2.
 - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset (Continued)

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II.I; and
 - d. The permittee complied with any remedial measures required under Part II.S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby

DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:

<http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, Total Recoverable	(3)	20		C	3 /5 YR
7440-38-2	Arsenic, Total Recoverable	(3)	20		C	3 /5 YR
7440-41-7	Beryllium, Total Recoverable	(3)	(4)		C	3 /5 YR
7440-43-9	Cadmium, Total Recoverable	(3)	3.0		C	3 /5 YR
16065-83-1	Chromium III, Total Recoverable ⁽⁵⁾	(3)	10		C	3 /5 YR
18540-29-9	Chromium VI, Total Recoverable ⁽⁵⁾	(3)	10		C	3 /5 YR
7440-50-8	Copper, Dissolved	(3)	5.0		C	3 /5 YR
7439-92-1	Lead, Total Recoverable	(3)	10		C	3 /5 YR
7439-97-6	Mercury, Total Recoverable	(3)	3		C	3 /5 YR
7440-02-0	Nickel, Total Recoverable	(3)	10		C	3 /5 YR
7782-49-2	Selenium, Total Recoverable	(3)	10		C	3 /5 YR
7440-22-4	Silver, Total Recoverable	(3)	1.0		C	3 /5 YR
7440-28-0	Thallium, Total Recoverable	(3)	(4)		C	3 /5 YR
7440-66-6	Zinc, Total Recoverable	(3)	50		C	3 /5 YR
BASE NEUTRAL EXTRACTABLES						
CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
83-32-9	Acenaphthene	610/625	10.0		C	3 /5 YR
208-96-5	Acenaphthylene	610/625	10.0		C	3 /5 YR
120-12-7	Anthracene	610/625	10.0		C	3 /5 YR
92-87-5	Benzidine	625	(4)		C	3 /5 YR
56-55-3	Benzo (a) anthracene	610/625	10.0		C	3 /5 YR
50-32-8	Benzo(a)pyrene	610/625	10.0		C	3 /5YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
BASE NEUTRAL EXTRACTABLES						
205-99-2	3,4 Benzo-fluoranthene	610/625	10.0		C	3 / 5 YR
191-24-2	Benzo (GHI) Perylene	610/625	10.0		C	3 / 5 YR
207-08-9	Benzo (K) Fluoranthene	610/625	10.0		C	3 / 5 YR
111-91-1	Bis 2-Chloroethoxy Methane	610/625	10.0		C	3 / 5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	(4)		C	3 / 5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	625	(4)		C	3 / 5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		C	3 / 5 YR
101-55-3	4-Bromophenyl Phenyl Ether	625	(4)		C	3 / 5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		C	3 / 5 YR
91-58-7	2-Chloronaphthalene	625	(4)		C	3 / 5 YR
7005-72-3	4-Chlorophenyl Phenyl Ether	625	(4)		C	3 / 5 YR
218-01-9	Chrysene	610/625	10.0		C	3 / 5 YR
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		C	3 / 5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		C	3 / 5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		C	3 / 5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		C	3 / 5 YR
91-94-1	3,3-Dichlorobenzidine	625	(4)		C	3 / 5 YR
84-66-2	Diethyl phthalate	625	10.0		C	3 / 5 YR
131-11-3	Dimethyl phthalate	625	(4)		C	3 / 5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		C	3 / 5 YR
117-84-0	Di-n-octyl Phthalate	625	(4)		C	3 / 5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		C	3 / 5 YR
606-20-2	2,6-Dinitrotoluene	625	(4)		C	3 / 5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(4)		C	3 / 5 YR
206-44-0	Fluoranthene	610/625	10.0		C	3 / 5 YR
86-73-7	Fluorene	610/625	10.0		C	3 / 5 YR
118-74-1	Hexachlorobenzene	625	(4)		C	3 / 5 YR
87-68-3	Hexachlorobutadiene	625	(4)		C	3 / 5 YR
77-47-4	Hexachlorocyclopentadiene	625	(4)		C	3 / 5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
BASE NEUTRAL EXTRACTABLES						
67-72-1	Hexachloroethane	625	(4)		C	3 /5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		C	3 /5 YR
78-59-1	Isophorone	625	10.0		C	3 /5 YR
91-20-3	Naphthalene	(3)	(4)		C	3 /5 YR
98-95-3	Nitrobenzene	625	10.0		C	3 /5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(4)		C	3 /5 YR
86-30-6	N-Nitrosodiphenylamine	625	(4)		C	3 /5 YR
85-01-8	Phenanthrene	(3)	(4)		C	3 /5 YR
129-00-0	Pyrene	610/625	10.0		C	3 /5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		C	3 /5 YR
CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
VOLATILE						
107-02-8	Acrolein	624	(4)		G	3 /5 YR
107-13-1	Acrylonitrile	624	(4)		G	3 /5 YR
71-43-2	Benzene	602/624	10.0		G	3 /5 YR
75-25-2	Bromoform	624	10.0		G	3 /5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	3 /5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50.0		G	3 /5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	3 /5 YR
75-00-3	Chloroethane	(3)	(4)		G	3 /5 YR
110-75-8	2-Chloro-Ethylvinyl Ether	(3)	(4)		G	3 /5 YR
67-66-3	Chloroform	624	10.0		G	3 /5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	3 /5 YR
75-34-3	1,1-Dichloroethane	(3)	(4)		G	3 /5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	3 /5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	3 /5 YR
156-60-5	1,2-trans-dichloroethylene	624	(4)		G	3 /5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
VOLATILES						
78-87-5	1,2-Dichloropropane	624	(4)		G	3 /5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	3 /5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(4)		G	3 /5 YR
74-87-3	Methyl Chloride	(3)	(4)		G	3 /5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	3 /5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(4)		G	3 /5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0		G	3 /5 YR
71-55-6	1,1,1-Trichloroethane	624	(4)		G	3 /5 YR
10-88-3	Toluene	602/624	10.0		G	3 /5 YR
79-00-5	1,1,2-Trichloroethane	624	(4)		G	3 /5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	3 /5 YR
75-01-4	Vinyl Chloride	624	10.0		G	3 /5 YR
ACID EXTRACTABLE						
59-50-7	p-Chloro-m-Cresol	625	10.0		C	3 /5 YR
95-57-8	2-Chlorophenol	625	10.0		C	3 /5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		C	3 /5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		C	3 /5 YR
534-52-1	4,6 Dinitro-o-Cresol	625	(4)		C	3 /5 YR
51-28-5	2,4-Dinitrophenol	625	(4)		C	3 /5 YR
88-75-5	2-Dinitrophenol	625	(4)		C	3 /5 YR
100-02-7	4-Nitrophenol	625	(4)		C	3 /5 YR
87-86-5	Pentachlorophenol	625	50.0		C	3 /5 YR
108-95-2	Phenol	625	10.0		C	3 /5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		C	3 /5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH ₃ -N	350.1	200		C	3 /5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY
MISCELLANEOUS						
57-12-5	Cyanide, Free ⁽⁶⁾	ASTM 4282-02	10.0		G	3 /5 YR
100-41-4	Hardness	(3)	(4)		C	3 /5 YR
	Oil and Grease	(3)	5.0		G	3 /5 YR
	Nitrate Plus Nitrite Nitrogen	(3)	(4)		C	3 /5 YR
	Total Kjeldahl Nitrogen	(3)	(4)		C	3/5 YR
	Total Dissolved Solids (mg/L)	(3)	(4)		C	3 /5 YR
	Total Phenolic Compounds	(4)	(4)		G	3 /5 YR

Name of Principal Executive Officer or Authorized Agent & Title

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

- (1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

- (2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

- (3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from (i) any approved method presented in 40 CFR Part 136 or (ii) any alternative EPA approved method provided that all analyses are in accordance with 1 VAC 30-45 (Certification for Noncommercial Environmental Laboratories), or 1 VAC 30-46 (Accreditation for Commercial Laboratories).
- (4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].
- (5) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (6) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

Permit No. VA0090671

Attachment B

Page 1 of 1